Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. Please cancel claim 38, amend claims 37 and 39 and add new claims 60-127 as follows:

Listing of Claims:

1-36. (Cancelled)

37. (Amended) A method for planarizing a microelectronic substrate, comprising:

biasing the microelectronic substrate against a planarizing medium with a flexible membrane to exert a first force on a first part of the microelectronic substrate and exert a second force greater than the first force on a second part of the microelectronic substrate, the substrate being held stationary relative to the membrane as the substrate is biased against the planarizing medium;

engaging the first part of the microelectronic substrate with a first portion of the flexible membrane having a first thickness;

engaging the second part of the microelectronic substrate with a second portion of the flexible membrane having a second thickness greater than the first thickness; and

moving at least one of the microelectronic substrate and the planarizing medium relative to the other to remove material from the microelectronic substrate.

38. (Cancelled)

39. (Amended) The method of claim [38] 37 wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially inwardly from the first annular part of the microelectronic substrate.

40. (Original) The method of claim ~~39~~ 2 wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially outwardly from the first annular part of the microelectronic substrate.

41. (Cancelled)

42. (Original) The method of claim ~~37~~ 1 wherein the membrane has a first surface facing toward the microelectronic substrate and a second surface facing generally opposite the first surface, further wherein biasing the microelectronic substrate against the planarizing medium includes biasing a generally flat support member against the second surface of the membrane.

43. (Original) The method of claim ~~37~~ 1 wherein biasing the microelectronic substrate against a planarizing medium includes biasing the microelectronic substrate against a first portion of a polishing pad, further wherein moving the at least one of the microelectronic substrate and the planarizing medium includes advancing the polishing pad from a supply roller to a take-up roller to engage a second portion of the polishing pad with the first and second parts of the microelectronic substrate

44. (Original) The method of claim ~~37~~ 1, further comprising forming the membrane by disposing a membrane material in a mold.

45. (Original) The method of claim ~~37~~ 1, further comprising forming the membrane by providing a first ply of a membrane material at the first and second portions of the membrane and attaching a second ply of the membrane material to the first ply at the second portion of the membrane.

8 ~~46.~~ (Original) The method of claim ~~37~~ 1 wherein moving at least one of the microelectronic substrate and the planarizing medium relative to the other includes moving the first part of the microelectronic substrate and the planarizing medium at a first linear velocity relative to each other and moving the second part of the microelectronic substrate and the planarizing medium at a second linear velocity relative to each other, further wherein removing material from the microelectronic substrate includes removing material from the first part of the microelectronic substrate at a first rate and removing material from the second part of the microelectronic substrate at a second rate approximately the same as the first rate.

9 ~~47.~~ (Original) The method of claim ~~37~~ 1 wherein the membrane is the first of a first and second membrane, each membrane having a first portion with a first thickness and a second portion with a second thickness, a ratio of the first thickness to the second thickness of the first membrane having a first value, a ratio of the first thickness to the second thickness of the second membrane having a second value different than the first value, further comprising selecting the first membrane from the first and second membranes.

10 ~~48.~~ (Previously Presented) A method for planarizing a microelectronic substrate, comprising:

biasing a first annular part of the microelectronic substrate against a planarizing medium with a first force by engaging the first annular part with a first portion of a flexible membrane having a first thickness;

biasing a second annular part of the microelectronic substrate against the planarizing medium with a second force greater than the first force by engaging the second annular part with a second portion of the flexible membrane having a second thickness greater than the first thickness, the substrate being held stationary relative to the membrane as the first annular part and the second annular part of the substrate is biased against the planarizing medium; and

moving at least one of the microelectronic substrate and the planarizing medium relative to the other to remove material from the microelectronic substrate.

49. (Cancelled)

50. (Original) The method of claim 48 wherein the membrane has a first surface facing toward the microelectronic substrate and a second surface facing generally opposite the first surface, further wherein biasing the microelectronic substrate against the planarizing medium includes biasing a generally flat support member against the second surface of the membrane.

51. (Original) The method of claim 48 wherein biasing the microelectronic substrate against a planarizing medium includes biasing the microelectronic substrate against a first portion of a polishing pad, further wherein moving the at least one of the microelectronic substrate and the planarizing medium includes advancing the polishing pad from a supply roller to a take-up roller to engage a second portion of the polishing pad with the first and second parts of the microelectronic substrate

52. (Original) The method of claim 48 wherein moving at least one of the microelectronic substrate and the planarizing medium relative to the other includes moving the first part of the microelectronic substrate and the planarizing medium at a first linear velocity relative to each other and moving the second part of the microelectronic substrate and the planarizing medium at a second linear velocity relative to each other, further wherein removing material from the microelectronic substrate includes removing material from the first part of the microelectronic substrate at a first rate and removing material from the second part of the microelectronic substrate at a second rate approximately the same as the first rate.

53. (Original) The method of claim 48 wherein the membrane is the first of a first and second membrane, each membrane having a first portion with a first thickness and a second portion with a second thickness, a ratio of the first thickness to the second thickness of the first membrane having a first value, a ratio of the first thickness to the second thickness of the second membrane having a second value different than the first value, further comprising selecting the first membrane from the first and second membranes.

54-59. (Cancelled)

15 60. (New) A method for planarizing a microelectronic substrate, comprising:

biasing the microelectronic substrate against a planarizing medium with a flexible membrane to exert a first force on a first part of the microelectronic substrate and exert a second force greater than the first force on a second part of the microelectronic substrate, the substrate being held stationary relative to the membrane as the substrate is biased against the planarizing medium;

engaging the first part of the microelectronic substrate with a first portion of the flexible membrane having a first thickness, wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate;

engaging the second part of the microelectronic substrate with a second portion of the flexible membrane having a second thickness greater than the first thickness, wherein engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially inwardly from the first annular part of the microelectronic substrate; and

moving at least one of the microelectronic substrate and the planarizing medium relative to the other to remove material from the microelectronic substrate.

16 61. (New) The method of claim 60 (15) wherein the membrane has a first surface facing toward the microelectronic substrate and a second surface facing generally opposite the first surface, further wherein biasing the microelectronic substrate against the planarizing medium includes biasing a generally flat support member against the second surface of the membrane.

17 62. (New) The method of claim 60 (15) wherein biasing the microelectronic substrate against a planarizing medium includes biasing the microelectronic substrate against a first portion of a polishing pad, further wherein moving the at least one of the microelectronic substrate and the planarizing medium includes advancing the polishing pad from a supply roller

to a take-up roller to engage a second portion of the polishing pad with the first and second parts of the microelectronic substrate

18 ~~63.~~ (New) The method of claim 15 ~~60~~, further comprising forming the membrane by disposing a membrane material in a mold.

19 ~~64.~~ (New) The method of claim 15 ~~60~~, further comprising forming the membrane by providing a first ply of a membrane material at the first and second portions of the membrane and attaching a second ply of the membrane material to the first ply at the second portion of the membrane.

20 ~~65.~~ (New) The method of claim 15 ~~60~~ wherein moving at least one of the microelectronic substrate and the planarizing medium relative to the other includes moving the first part of the microelectronic substrate and the planarizing medium at a first linear velocity relative to each other and moving the second part of the microelectronic substrate and the planarizing medium at a second linear velocity relative to each other, further wherein removing material from the microelectronic substrate includes removing material from the first part of the microelectronic substrate at a first rate and removing material from the second part of the microelectronic substrate at a second rate approximately the same as the first rate.

21 ~~66.~~ (New) The method of claim 15 ~~60~~ wherein the membrane is the first of a first and second membrane, each membrane having a first portion with a first thickness and a second portion with a second thickness, a ratio of the first thickness to the second thickness of the first membrane having a first value, a ratio of the first thickness to the second thickness of the second membrane having a second value different than the first value, further comprising selecting the first membrane from the first and second membranes.

22 ~~67.~~ (New) A method for planarizing a microelectronic substrate, comprising:

biasing the microelectronic substrate against a planarizing medium with a flexible membrane to exert a first force on a first part of the microelectronic substrate and exert a second

force greater than the first force on a second part of the microelectronic substrate, the substrate being held stationary relative to the membrane as the substrate is biased against the planarizing medium;

engaging the first part of the microelectronic substrate with a first portion of the flexible membrane having a first thickness, wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate;

engaging the second part of the microelectronic substrate with a second portion of the flexible membrane having a second thickness greater than the first thickness, wherein engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially outwardly from the first annular part of the microelectronic substrate; and

moving at least one of the microelectronic substrate and the planarizing medium relative to the other to remove material from the microelectronic substrate.

23 22
~~68.~~ (New) The method of claim ~~67~~ wherein the membrane has a first surface facing toward the microelectronic substrate and a second surface facing generally opposite the first surface, further wherein biasing the microelectronic substrate against the planarizing medium includes biasing a generally flat support member against the second surface of the membrane.

24 22
~~69.~~ (New) The method of claim ~~67~~ wherein biasing the microelectronic substrate against a planarizing medium includes biasing the microelectronic substrate against a first portion of a polishing pad, further wherein moving the at least one of the microelectronic substrate and the planarizing medium includes advancing the polishing pad from a supply roller to a take-up roller to engage a second portion of the polishing pad with the first and second parts of the microelectronic substrate.

25 22
~~70.~~ (New) The method of claim ~~67~~, further comprising forming the membrane by disposing a membrane material in a mold.

26 71. (New) The method of claim 67, further comprising forming the membrane by providing a first ply of a membrane material at the first and second portions of the membrane and attaching a second ply of the membrane material to the first ply at the second portion of the membrane.

27 72. (New) The method of claim 67 wherein moving at least one of the microelectronic substrate and the planarizing medium relative to the other includes moving the first part of the microelectronic substrate and the planarizing medium at a first linear velocity relative to each other and moving the second part of the microelectronic substrate and the planarizing medium at a second linear velocity relative to each other, further wherein removing material from the microelectronic substrate includes removing material from the first part of the microelectronic substrate at a first rate and removing material from the second part of the microelectronic substrate at a second rate approximately the same as the first rate.

28 73. (New) The method of claim 67 wherein the membrane is the first of a first and second membrane, each membrane having a first portion with a first thickness and a second portion with a second thickness, a ratio of the first thickness to the second thickness of the first membrane having a first value, a ratio of the first thickness to the second thickness of the second membrane having a second value different than the first value, further comprising selecting the first membrane from the first and second membranes.

29 74. (New) A method for planarizing a microelectronic substrate, comprising:

biasing the microelectronic substrate against a planarizing medium with a flexible membrane to exert a first force on a first part of the microelectronic substrate and exert a second force greater than the first force on a second part of the microelectronic substrate, the substrate being held stationary relative to the membrane as the substrate is biased against the planarizing medium, wherein the membrane has a first surface facing toward the microelectronic substrate and a second surface facing generally opposite the first surface, further wherein biasing the

microelectronic substrate against the planarizing medium includes biasing a generally flat support member against the second surface of the membrane; and

moving at least one of the microelectronic substrate and the planarizing medium relative to the other to remove material from the microelectronic substrate.

30 29
75. (New) The method of claim 74, further comprising:

engaging the first part of the microelectronic substrate with a first portion of the flexible membrane having a first thickness;

engaging the second part of the microelectronic substrate with a second portion of the flexible membrane having a second thickness greater than the first thickness.

31 30
76. (New) The method of claim 75 wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially inwardly from the first annular part of the microelectronic substrate.

32 30
77. (New) The method of claim 75 wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially outwardly from the first annular part of the microelectronic substrate.

33 29
78. (New) The method of claim 74 wherein biasing the microelectronic substrate against a planarizing medium includes biasing the microelectronic substrate against a first portion of a polishing pad, further wherein moving the at least one of the microelectronic substrate and the planarizing medium includes advancing the polishing pad from a supply roller to a take-up roller to engage a second portion of the polishing pad with the first and second parts of the microelectronic substrate

34 79. (New) The method of claim 29 74, further comprising forming the membrane by disposing a membrane material in a mold.

35 80. (New) The method of claim 29 74, further comprising forming the membrane by providing a first ply of a membrane material at the first and second portions of the membrane and attaching a second ply of the membrane material to the first ply at the second portion of the membrane.

36 81. (New) The method of claim 29 74 wherein moving at least one of the microelectronic substrate and the planarizing medium relative to the other includes moving the first part of the microelectronic substrate and the planarizing medium at a first linear velocity relative to each other and moving the second part of the microelectronic substrate and the planarizing medium at a second linear velocity relative to each other, further wherein removing material from the microelectronic substrate includes removing material from the first part of the microelectronic substrate at a first rate and removing material from the second part of the microelectronic substrate at a second rate approximately the same as the first rate.

37 82. (New) The method of claim 29 74 wherein the membrane is the first of a first and second membrane, each membrane having a first portion with a first thickness and a second portion with a second thickness, a ratio of the first thickness to the second thickness of the first membrane having a first value, a ratio of the first thickness to the second thickness of the second membrane having a second value different than the first value, further comprising selecting the first membrane from the first and second membranes.

38 83. (New) A method for planarizing a microelectronic substrate, comprising:

biasing the microelectronic substrate against a planarizing medium with a flexible membrane to exert a first force on a first part of the microelectronic substrate and

exert a second force greater than the first force on a second part of the microelectronic substrate, the substrate being held stationary relative to the membrane as the substrate is biased against the planarizing medium, wherein biasing the microelectronic substrate against a planarizing medium includes biasing the microelectronic substrate against a first portion of a polishing pad, further wherein moving the at least one of the microelectronic substrate and the planarizing medium includes advancing the polishing pad from a supply roller to a take-up roller to engage a second portion of the polishing pad with the first and second parts of the microelectronic substrate; and

moving at least one of the microelectronic substrate and the planarizing medium relative to the other to remove material from the microelectronic substrate.

39 38
84. (New) The method of claim 83, further comprising:

engaging the first part of the microelectronic substrate with a first portion of the flexible membrane having a first thickness;

engaging the second part of the microelectronic substrate with a second portion of the flexible membrane having a second thickness greater than the first thickness.

40 39
85. (New) The method of claim 84 wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially inwardly from the first annular part of the microelectronic substrate.

41 39
86. (New) The method of claim 84 wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially outwardly from the first annular part of the microelectronic substrate.

87. (New) The method of claim 38 wherein the membrane has a first surface facing toward the microelectronic substrate and a second surface facing generally opposite the first surface, further wherein biasing the microelectronic substrate against the planarizing medium includes biasing a generally flat support member against the second surface of the membrane.

88. (New) The method of claim 38, further comprising forming the membrane by disposing a membrane material in a mold.

89. (New) The method of claim 38, further comprising forming the membrane by providing a first ply of a membrane material at the first and second portions of the membrane and attaching a second ply of the membrane material to the first ply at the second portion of the membrane.

90. (New) The method of claim 38 wherein moving at least one of the microelectronic substrate and the planarizing medium relative to the other includes moving the first part of the microelectronic substrate and the planarizing medium at a first linear velocity relative to each other and moving the second part of the microelectronic substrate and the planarizing medium at a second linear velocity relative to each other, further wherein removing material from the microelectronic substrate includes removing material from the first part of the microelectronic substrate at a first rate and removing material from the second part of the microelectronic substrate at a second rate approximately the same as the first rate.

91. (New) The method of claim 38 wherein the membrane is the first of a first and second membrane, each membrane having a first portion with a first thickness and a second portion with a second thickness, a ratio of the first thickness to the second thickness of the first membrane having a first value, a ratio of the first thickness to the second thickness of the second membrane having a second value different than the first value, further comprising selecting the first membrane from the first and second membranes.

47 92. (New) A method for planarizing a microelectronic substrate, comprising:

biasing the microelectronic substrate against a planarizing medium with a flexible membrane formed by disposing a membrane material in a mold, the membrane exerting a first force on a first part of the microelectronic substrate and exert a second force greater than the first force on a second part of the microelectronic substrate, the substrate being held stationary relative to the membrane as the substrate is biased against the planarizing medium; and

moving at least one of the microelectronic substrate and the planarizing medium relative to the other to remove material from the microelectronic substrate.

46 93. (New) The method of claim 47 92, further comprising:

engaging the first part of the microelectronic substrate with a first portion of the flexible membrane having a first thickness;

engaging the second part of the microelectronic substrate with a second portion of the flexible membrane having a second thickness greater than the first thickness.

49 94. (New) The method of claim 48 93 wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially inwardly from the first annular part of the microelectronic substrate.

50 95. (New) The method of claim 48 93 wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially outwardly from the first annular part of the microelectronic substrate.

51 96. (New) The method of claim 47 92 wherein the membrane has a first surface facing toward the microelectronic substrate and a second surface facing generally opposite the first surface, further wherein biasing the microelectronic substrate against the planarizing

medium includes biasing a generally flat support member against the second surface of the membrane.

52 ~~97.~~ (New) The method of claim 47 ~~92~~ wherein biasing the microelectronic substrate against a planarizing medium includes biasing the microelectronic substrate against a first portion of a polishing pad, further wherein moving the at least one of the microelectronic substrate and the planarizing medium includes advancing the polishing pad from a supply roller to a take-up roller to engage a second portion of the polishing pad with the first and second parts of the microelectronic substrate.

53 ~~98.~~ (New) The method of claim 47 ~~92~~, further comprising forming the membrane by providing a first ply of a membrane material at the first and second portions of the membrane and attaching a second ply of the membrane material to the first ply at the second portion of the membrane.

54 ~~99.~~ (New) The method of claim 47 ~~92~~ wherein moving at least one of the microelectronic substrate and the planarizing medium relative to the other includes moving the first part of the microelectronic substrate and the planarizing medium at a first linear velocity relative to each other and moving the second part of the microelectronic substrate and the planarizing medium at a second linear velocity relative to each other, further wherein removing material from the microelectronic substrate includes removing material from the first part of the microelectronic substrate at a first rate and removing material from the second part of the microelectronic substrate at a second rate approximately the same as the first rate.

55 ~~100.~~ (New) The method of claim 47 ~~92~~ wherein the membrane is the first of a first and second membrane, each membrane having a first portion with a first thickness and a second portion with a second thickness, a ratio of the first thickness to the second thickness of the first membrane having a first value, a ratio of the first thickness to the second thickness of the second membrane having a second value different than the first value, further comprising selecting the first membrane from the first and second membranes.

56 ~~101.~~ (New) A method for planarizing a microelectronic substrate, comprising:

forming a flexible membrane by providing a first ply of a membrane material at a first and second portions of the membrane and attaching a second ply of the membrane material to the first ply at the second portion of the membrane;

biasing the microelectronic substrate against a planarizing medium with the flexible membrane to exert a first force on a first part of the microelectronic substrate and exert a second force greater than the first force on a second part of the microelectronic substrate, the substrate being held stationary relative to the membrane as the substrate is biased against the planarizing medium; and

moving at least one of the microelectronic substrate and the planarizing medium relative to the other to remove material from the microelectronic substrate.

57 ~~102.~~ (New) The method of claim 56 ~~101~~, further comprising:

engaging the first part of the microelectronic substrate with a first portion of the flexible membrane having a first thickness;

engaging the second part of the microelectronic substrate with a second portion of the flexible membrane having a second thickness greater than the first thickness.

58 ~~103.~~ (New) The method of claim 57 ~~102~~ wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially inwardly from the first annular part of the microelectronic substrate.

59 ~~104.~~ (New) The method of claim 57 ~~102~~ wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially outwardly from the first annular part of the microelectronic substrate.

60 105. (New) The method of claim 56 ~~101~~ wherein the membrane has a first surface facing toward the microelectronic substrate and a second surface facing generally opposite the first surface, further wherein biasing the microelectronic substrate against the planarizing medium includes biasing a generally flat support member against the second surface of the membrane.

61 106. (New) The method of claim 56 ~~101~~ wherein biasing the microelectronic substrate against a planarizing medium includes biasing the microelectronic substrate against a first portion of a polishing pad, further wherein moving the at least one of the microelectronic substrate and the planarizing medium includes advancing the polishing pad from a supply roller to a take-up roller to engage a second portion of the polishing pad with the first and second parts of the microelectronic substrate

62 107. (New) The method of claim 56 ~~101~~, further comprising forming the membrane by disposing a membrane material in a mold.

63 108. (New) The method of claim 56 ~~101~~ wherein moving at least one of the microelectronic substrate and the planarizing medium relative to the other includes moving the first part of the microelectronic substrate and the planarizing medium at a first linear velocity relative to each other and moving the second part of the microelectronic substrate and the planarizing medium at a second linear velocity relative to each other, further wherein removing material from the microelectronic substrate includes removing material from the first part of the microelectronic substrate at a first rate and removing material from the second part of the microelectronic substrate at a second rate approximately the same as the first rate.

64 109. (New) The method of claim 56 ~~101~~ wherein the membrane is the first of a first and second membrane, each membrane having a first portion with a first thickness and a second portion with a second thickness, a ratio of the first thickness to the second thickness of the first membrane having a first value, a ratio of the first thickness to the second thickness of the

second membrane having a second value different than the first value, further comprising selecting the first membrane from the first and second membranes.

65
110. (New) A method for planarizing a microelectronic substrate, comprising:

biasing the microelectronic substrate against a planarizing medium with a flexible membrane to exert a first force on a first part of the microelectronic substrate and exert a second force greater than the first force on a second part of the microelectronic substrate, the substrate being held stationary relative to the membrane as the substrate is biased against the planarizing medium; and

moving at least one of the microelectronic substrate and the planarizing medium relative to the other to remove material from the microelectronic substrate, wherein moving includes moving the first part of the microelectronic substrate and the planarizing medium at a first linear velocity relative to each other and moving the second part of the microelectronic substrate and the planarizing medium at a second linear velocity relative to each other, further wherein removing material from the microelectronic substrate includes removing material from the first part of the microelectronic substrate at a first rate and removing material from the second part of the microelectronic substrate at a second rate approximately the same as the first rate.

66 65
111. (New) The method of claim 110, further comprising:

engaging the first part of the microelectronic substrate with a first portion of the flexible membrane having a first thickness;

engaging the second part of the microelectronic substrate with a second portion of the flexible membrane having a second thickness greater than the first thickness.

67 66
112. (New) The method of claim 111 wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second

annular part of the microelectronic substrate disposed radially inwardly from the first annular part of the microelectronic substrate.

113. (New) The method of claim 111 wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially outwardly from the first annular part of the microelectronic substrate.

114. (New) The method of claim 110 wherein the membrane has a first surface facing toward the microelectronic substrate and a second surface facing generally opposite the first surface, further wherein biasing the microelectronic substrate against the planarizing medium includes biasing a generally flat support member against the second surface of the membrane.

115. (New) The method of claim 110 wherein biasing the microelectronic substrate against a planarizing medium includes biasing the microelectronic substrate against a first portion of a polishing pad, further wherein moving the at least one of the microelectronic substrate and the planarizing medium includes advancing the polishing pad from a supply roller to a take-up roller to engage a second portion of the polishing pad with the first and second parts of the microelectronic substrate

116. (New) The method of claim 110, further comprising forming the membrane by disposing a membrane material in a mold.

117. (New) The method of claim 110, further comprising forming the membrane by providing a first ply of a membrane material at the first and second portions of the membrane and attaching a second ply of the membrane material to the first ply at the second portion of the membrane.

73 65
~~118.~~ (New) The method of claim ~~110~~ wherein the membrane is the first of a first and second membrane, each membrane having a first portion with a first thickness and a second portion with a second thickness, a ratio of the first thickness to the second thickness of the first membrane having a first value, a ratio of the first thickness to the second thickness of the second membrane having a second value different than the first value, further comprising selecting the first membrane from the first and second membranes.

74
~~119.~~ (New) A method for planarizing a microelectronic substrate, comprising:

biasing the microelectronic substrate against a planarizing medium with a flexible membrane to exert a first force on a first part of the microelectronic substrate and exert a second force greater than the first force on a second part of the microelectronic substrate, the substrate being held stationary relative to the membrane as the substrate is biased against the planarizing medium, wherein the membrane is the first of a first and second membrane, each membrane having a first portion with a first thickness and a second portion with a second thickness, a ratio of the first thickness to the second thickness of the first membrane having a first value, a ratio of the first thickness to the second thickness of the second membrane having a second value different than the first value, further comprising selecting the first membrane from the first and second membranes; and

moving at least one of the microelectronic substrate and the planarizing medium relative to the other to remove material from the microelectronic substrate.

75 74
~~120.~~ (New) The method of claim ~~119~~, further comprising:

engaging the first part of the microelectronic substrate with a first portion of the flexible membrane having a first thickness;

engaging the second part of the microelectronic substrate with a second portion of the flexible membrane having a second thickness greater than the first thickness.

76 75
~~121.~~ (New) The method of claim ~~120~~ wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate

and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially inwardly from the first annular part of the microelectronic substrate.

77 75
~~122.~~ (New) The method of claim ~~120~~ wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially outwardly from the first annular part of the microelectronic substrate.

78 74
~~123.~~ (New) The method of claim ~~119~~ wherein the membrane has a first surface facing toward the microelectronic substrate and a second surface facing generally opposite the first surface, further wherein biasing the microelectronic substrate against the planarizing medium includes biasing a generally flat support member against the second surface of the membrane.

79 74
~~124.~~ (New) The method of claim ~~119~~ wherein biasing the microelectronic substrate against a planarizing medium includes biasing the microelectronic substrate against a first portion of a polishing pad, further wherein moving the at least one of the microelectronic substrate and the planarizing medium includes advancing the polishing pad from a supply roller to a take-up roller to engage a second portion of the polishing pad with the first and second parts of the microelectronic substrate.

80 74
~~125.~~ (New) The method of claim ~~119~~, further comprising forming the membrane by disposing a membrane material in a mold.

81 74
~~126.~~ (New) The method of claim ~~119~~, further comprising forming the membrane by providing a first ply of a membrane material at the first and second portions of the membrane and attaching a second ply of the membrane material to the first ply at the second portion of the membrane.

127. (New) The method of claim 119 wherein moving at least one of the microelectronic substrate and the planarizing medium relative to the other includes moving the first part of the microelectronic substrate and the planarizing medium at a first linear velocity relative to each other and moving the second part of the microelectronic substrate and the planarizing medium at a second linear velocity relative to each other, further wherein removing material from the microelectronic substrate includes removing material from the first part of the microelectronic substrate at a first rate and removing material from the second part of the microelectronic substrate at a second rate approximately the same as the first rate.